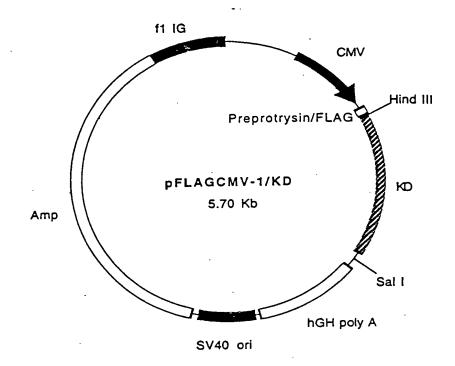


Fig. 1



f1 IG CMV Hind III Preprotrysin/FLAG pFLAGCMV-1/PD Fig. 3 5.70 Kb Amp Sal I hGH poly A SV40 ori

Fig. 2

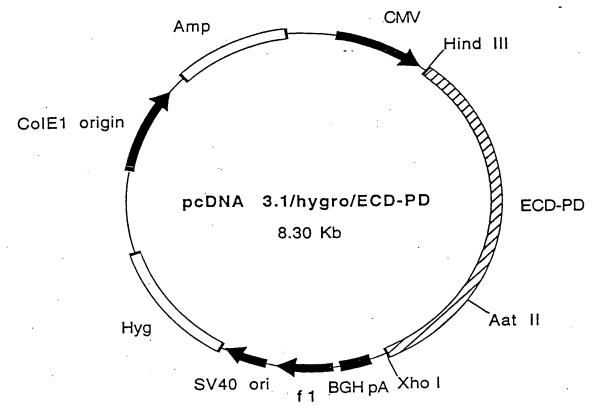


Fig. 5

pcDNA3.1hyg/ECD-PD expression

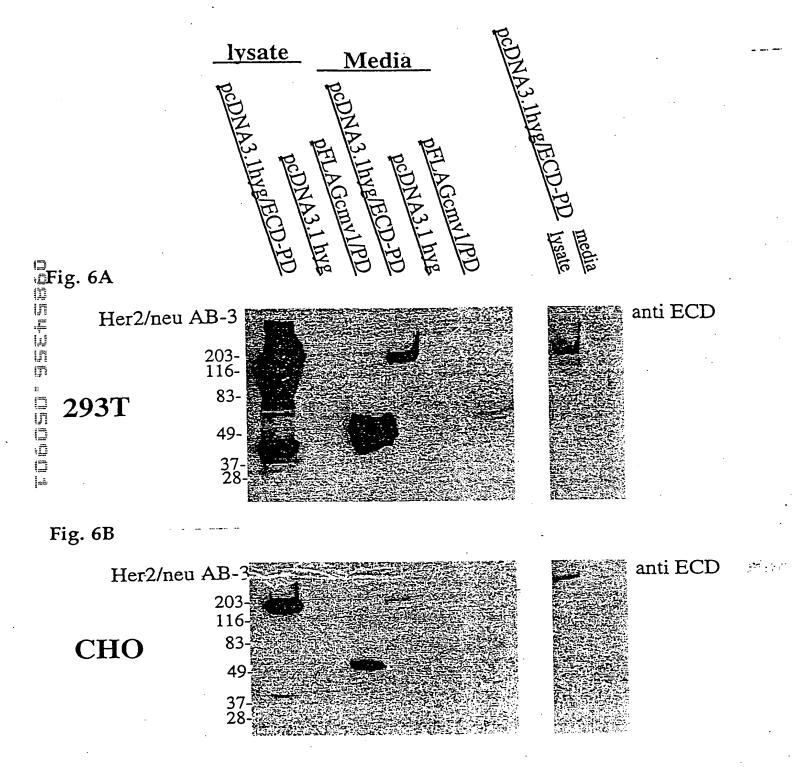


Fig. 7 (SEQ ID NO: 1)

	10	20	
Ala Ser Thr Gin Val Cys Ti	ys Arg Trp Gly Leu Leu Leu hr Gly Thr Asp Met Lys Leu ng His Leu Tyr Gln Gly Cys (lrg Leu Pro Ala Ser Pro Glu	20 40 60
Glu Leu Thr Tyr Leu Pro Ti	hr Asn Ala Ser Leu Ser Phe I Ja His Asn Gin Vai Arg Gin '	.eu Gin Asp Iie Gin Giu Vai Vai Pro Leu Gin Arg Leu Arg	80 100
	. 110	120	
Asp Pro Leu Asn Asn Thr Ti Gin Leu Arg Ser Leu Thr G Leu Lys Tyr Gin Asp Thr Ii	eu Phe Glu Asp Asn Tyr Ala I hr Pro Val Thr Gly Ala Serf Ilu Ile Leu Lys Gly Gly Val I le Leu Trp Lys Asp Ile Phe I sn Arg Ser Arg Ala Cys His I 210	Pro Gly Gly Leu Arg Glu Leu Leu Ile Gln: Arg Asn Pro Gln His Lys Asn Asn Gln Leu Ala	120 140 160 180 200
Ala Gly Gly Cys Ala Arg C Ala Ala Gly Cys Thr Gly Pi Ser Gly Ile Cys Glu Leu H	liu Ser Ser Glu Asp Cys Gln S ys Lys Gly Pro Leu Pro Thr ro Lys His Ser Asp Cys Leu lis Cys Pro Ala Leu Val Thr Bly Arg Tyr Thr Phe Gly Ala S 310	Asp Cys Cys His Glu Gln Cys Alo Cys Leu His Phe Asn His Tyr Asn Thr Asp Thr Phe Glu	220 240 260 280 300
		<u> </u>	200
Glu Kai Thr Ala Glu Asp G Vai Cys Tyr Gly Leu Gly M Ile Gin Glu Phe Ala Gly C	ys Lys Lys Ile Phe Gly Ser	Val Cys Pro Leu His Ash Gin Cys Ser Lys Pro Cys Ala Arg Arg Ala Val Thr Ser Ala Ash Leu Ala Phe Leu Pro Glu Ser Pro Glu Gin Leu Gin Val Phe 420	320 340 360 380 400
0, 7, 1, 0, 0, 1, To T	he Chy Tree In Con	Alo Tao Pao Aso Sec Ley Pao	420
Asp Leu Ser Val Phe Gin A Tyr Ser Leu Thr Leu Gin G Leu Gly Ser Gly Leu Ala L	isn Leu Gin Val IIe Arg Gly Gly Leu Gly IIe Ser Trp Leu eu IIe His His Asn Thr His urg Asn Pro His Gin Ala Leu	Ala Trp Pro Asp Ser Leu Pro Arg Ile Leu His Asn Gly Ala Gly Leu Arg Ser Leu Arg Glu Leu Cys Phe Val His Thr Val Leu His Thr Ala Asn Arg Pro	440 460 480 500
	510	520	
Trp Gly Pro Gly Pro Thr C Val Glu Glu Cys Arg Val L Leu Pro Cys His Pro Glu C	Gin Cys Vai Asn Cys Ser Gin Leu Gin Giy Leu Pro Arg Giu Cys Gin Pro Gin Asn Giy Ser	Leu Cys Ala Arg Gly His Cys Phe Leu Arg Gly Gln Glu Cys Tyr Val Asn Ala Arg His Cys Val Thr Cys Phe Gly Pro Glu Pro Phe Cys Val Ala Arg Cys	520 540 560 580 600

Fig. 7 (SEQ ID NO: 1)

610	620	
Gly Cys Pro Ala Glu Gln Arg Ala Ser Pro The Leu Leu Val Val Val Leu Gly Val Val	Thr His Ser Cys Val Asp Leu Asp Asp Lys Leu Thr Ser IIe IIe Ser Ala Val Val Gly Phe Gly IIe Leu IIe Lys Arg Arg Gln Gin Leu Gln Glu Thr Glu Leu Val Glu Pro Leu	620 640 660 680 700
Arg Lys Val Lys Val Leu Gly Ser Gly Ala Pro Asp Gly Glu Asn Val Lys Ile Pro Val Pro Lys Ala Asn Lys Glu Ile Leu Asp Glu	Gin Met Arg IIe Leu Lys Glu Thr Glu Leu Phe Gly Thr Val Tyr Lys Gly IIe Trp IIe Ala IIe Lys Val Leu Arg Glu Asn Thr Ser Ala Tyr Val Met Ala Gly Val Gly Ser Pro Thr Ser Thr Val Gin Leu Val Thr Gln Leu 820	720 740 760 780 800
Asp Leu Leu Asn Trp Cys Met Gln Ile Ala Leu Val His Arg Asp Leu Ala Ala Arg Asn Ila Thr Aso Phe Gly Leu Ala Ara Leu Leu	Arg Glu Asn Arg Gly Arg Leu Gly Ser Gln Lys Gly Met Ser Tyr Leu Glu Asp Val Arg Val Leu Val Lys Ser Pro Asn His Val Lys Asp Ile Asp Glu Thr Glu Tyr His Ala Asp Leu Glu Ser Ile Leu Arg Arg Arg Phe Thr 920	820 840 860 880 900
Lys Pro Tyr Asp Gly Ile Pro Ala Arg Glu Leu Pro Gln Pro Pro Ile Cys Thr Ile Asp Ile Asp Ser Glu Cys Arg Pro Arg Phe Arg	Thr Val Trp Glu Leu Met Thr Phe Gly Ala Ile Pro Asp Leu Leu Glu Lys Gly Glu Arg Val Tyr Met Ile Met Val Lys Cys Trp Met Glu Leu Val Ser Glu Phe Ser Arg Met Ala Ash Glu Asp Leu Gly Pro Ala Ser Pro Leu 0 1020	920 940 960 980 1000
Glu Glu Tyr Leu Val Pro Gln Gln Gly Phe Gly Met Val His His Arg His Arg Ser Ser Leu Gly Leu Glu Pro Ser Glu Glu Glu Ala	Asp Asp Asp Met Gly Asp Leu Val Asp Ala Phe Cys Pro Asp Pro Ala Pro Gly Ala Gly Ser Thr Arg Ser Gly Gly Gly Asp Leu Thr Pro Arg Ser Pro Leu Ala Pro Ser Glu Gly Gly Met Gly Ala Ala Lys Gly Leu Gln Ser 0	1020 1040 1060 1080 1100
Pro Ser Glu Thr Asp Gly Tyr Val Ala Pro Asn Gln Pro Asp Val Arg Pro Gln Pro Pro Ara Pro Ala Gly Ala Thr Leu Glu Arg Pro	Arg Tyr Ser Giu Asp Pro Thr Vai Pro Leu Leu Thr Cys Ser Pro Gin Pro Giu Tyr Vai Ser Pro Arg Giu Giy Pro Leu Pro Ala Ala Lys Thr Leu Ser Pro Giy Lys Asn Giy Vai Vai Giu Asn Pro Giu Tyr Leu Thr Pro Gin 0	1120 1140 1160 1180 1200
Gly Gly Ala Ala Pro Gin Pro His Pro Pro Tyr Tyr Trp Asp Gin Asp Pro Pro Glu Arg Pro Thr Ala Glu Asn Pro Glu Tyr Leu Gly	Pro Ala Phe Ser Pro Ala Phe Asp Asn Leu Gly Ala Pro Pro Ser Thr Phe Lys Gly Thr Leu Asp Val Pro Val	1220 1240

Fig. 8 (SEQ ID NO: 2)

	10	20
Ala Gly Thr Gin Val Cys Thr Gly Thr	Gly Phe Leu Leu Ala Leu Leu Pro Pro Asp Met Lys Leu Arg Leu Pro Ala Ser	Pro Glu 40
The His Leu Asp Met Leu Arg His Leu Clu Leu The Tyr Val Pro Ala Ash Ala	: Tyr Gin Gly Cys Gin Val Val Gin Gly Ser Leu Ser Phe Leu Gin Asp Ile Gin	Asn Leu 60 Glu Val 80
Gin Gly Tyr Met Leu lie Ala His Asn	i Gin Vai Lys Arg Vai Pro Leu Gin Arg	Leu Arg 100
	110	120
Ile Val Arg Gly Thr Gin Leu Phe Glu	Asp Lys Tyr Ala Leu Ala Val Leu Asp	Asn Arg 120
Asp Pro Gin Asp Ash Val Ala Ala Ser Leu Cin Leu Ara Ser Leu Thr Giu Ile	Thr Pro Gly Arg Thr Pro Glu Gly Leu Leu Lys Gly Gly Val Leu Ile Arg Gly	Arg Glu 140 Asn Pro/ 160
Gin Leu Cys Tyr Gin Asp Met Val Leu	ı Trp Lys Asp Val Phe Arg Lys Asn Asn	GIn Leu 180
Ala Fo Val Asp Ile Asp Thr Asn Arg	Ser Arg Ala Cys Pro Pro Cys Ala Pro	Ala Cys 200 220
	210	
Lys Asp Asn His Cys Trp Gly Glu Ser	- Pro Glu Asp Cys Gin Ile Leu Thr Gly	Thr Ile 220 Glu Gln 240
Cysiin Ser Gly Lys Ald Arg Lys Lys Cysiin Ala Gly Cys Thr Gly Pro Lys	s Gly Arg Leu Pro Thr Asp Cys Cys His s His Ser Asp Cys Leu Ala Cys Leu His	
His Ser Gly Ile Cys Glu Leu His Cys	s Pro Ala Leu Val Thr Tyr Asn Thr Asp	Thr Phe 280
Glu Ser Met His Ash Pro Glu Gly Arg	Tyr Thr Phe Gly Ala Ser Cys Val Thr	Thr Cys 300 320
	310	
Profyr Asn Tyr Leu Ser Thr Glu Val	Gly Ser Cys Thr Leu Vai Cys Pro Pro	Asn Asn 320 Cys Alg 340
Gin tale val inc all alle asp by inc	- Gin Arg Cys Giu Lys Cys Ser Lys Pro : His Leu Arg Giy Ala Arg Ala Ile Thr	
Ash Val Gin Glu Phe Asp Gly Cys Lys	s Lys Ile Phe Gly-Ser Leu Ala Phe Leu	Pro Glu 380
Ser Phe Asp Gly Asp Pro Ser Ser Gly	/ Ile Ala Pro Leu Arg Pro Glu Gin Leu	420 400
	410	
Phe Glu Thr Leu Glu Glu Ile Thr Gly	Tyr Leu Tyr Ile Ser Ala Trp Pro Ass	Ser Leu 420 Aso Gly 440
Arg Asp Leu Ser Val Phe Gin Ash Leu Ala Tyr Ser Leu Thr Leu Gin Gly Leu	u Arg Ile Ile Arg Gly Arg Ile Leu His u Gly Ile His Ser Leu Gly Leu Arg Ser	- Leu Arg 460
Glu Leu Gly Ser Gly Leu Ala Leu Ile	e His Arg Asn Ala His Leu Cys Phe Val	His Thr 480
Val Pro Trp Asp Gln Leu Phe Arg Asi	n Pro His Gin Ala Leu Leu His Ser Gly 510	520
Pro Giu Glu Asp Cys Gly Leu Glu Gly	y Leu Val Cys Asn Ser Leu Cys Ala His	Gly His 520 Glo Glu 540
Cys Val Glu Glu Cys Arg Val Trp Ly	s Val Asn Cys Ser His Phe Leu Arg Gly s Gly Leu Pro Arg Glu Tyr Val Ser Asp	b Lys Arg 560
Cysteu Pro Cys His Pro Glu Cys Gli	n Pro Gin Asn Ser Ser Glu Thr Cys Pho	e Gly Ser 500
Glu Ala Asp Gin Cys Ala Ala Cys Ala	a His Tyr Lys Asp Ser Ser Ser Cys Va	I AIG AFG GOO

Fig. 8 (SEQ ID NO: 2)

610	620
Cys Pro Ser Gly Val Lys Pro Asp Leu Ser Tyr Met Pro Ile Trp	Lys Tyr Pro Asp Glu 620
of the tre Rio Pro I'vs Pro Ile Ash I'vs Ihr His Ser Lys	and aspited aspitation of the control of the contro
A OL CLA PER AIR BILL BIN ACO AIR SEC PER VOI INT PRE ILE	Ite vid tu adi adi oco
of various and Phelieus lie Leus Val Val Val Val Val Val Val	life rys wg wg wg tooc
Gin Lys Ile Arg Lys Tyr Thr Met Arg Arg Leu Leu Gin Giu Thr	GIO LEO VOI GIO FIO VOO
710	720
Leu Thr Pro Ser Gly Ala Met Pro Ash Gln Ala Gln Met Arg Ile	Leu Lys Glu Thr Glu 720 Tyr Lys Gly Ile Trp 740
La Lag Lie Vol Lie Vol Leu Gly Ser Gly Ala Phe Gly Inc Val	lyr Lys diy he hp 740
The Pro Asp Gly Glu Asn Val Lys The Pro Val Ala The Lys Val	
Ser Pro Lys Ala Asn Lys Glu Ile Leu Asp Glu Ala Tyr Val Met	
Pro Tyr Val Ser Arg Leu Leu Gly Ile Cys Leu Thr Ser Thr Val	820
810	420
	Gly Ara Leu Gly Ser 820
Leu Met Pro Tyr Gly Cys Leu Leu Asp His Val Arg Glu His Arg	, -1/, · · · · · · · · · · · · · · · · · · ·
Gin Asp Leu Leu Asn Trp Cys Val Gin Ile Ala Lys Giy Met Ser Arg Leu Val His Arg Asp Leu Ala Ala Arg Asn Val Leu Val Lys	·//· = · · · · · · · · · · · · · · · · ·
Lys He Thr Asp Phe Gly Leu Ala Arg Leu Leu Asp Ile Asp Glu	The Glu Tyr His Ala 880
Asp Gly Lys Val Pro Ile Lys Trp Met Ala Leu Glu Ser Ile	Leu Arg Arg Arg Phe 900
910	920
910	
The His Gin Ser Asp Val Trp Ser Tyr Gly Val The Val Trp Glu	Leu Met Thr Phe Gly 920
AL WE DON THE ASO GIV THE PRO AIG ARG GIV THE PRO ASP LEV	a Lea did the gia and a second
And 18. Pro Gio Pro Pro Ile Cys. The Ile Aso Val lyr Met Ile	tier Agrees charithe 200
Mar Mar Sec Clu. Eve Aro Pro Aro Phe Aro Glu Leu Vol Ser	r Glu Frie Sei Aig riet 300
Ala Arg Asp Pro Gin Arg Phe Val Val Ile Gin Asn Glu Asp Leu	d Gly Pro Sel Sel 110 1000
1010	1020
	1000
Met Asp Ser Thr Phe Tyr Arg Ser Leu Leu Glu Asp Asp Asp Me	t Gly Asp Leu Val Asp 1020 o Pro Thr Pro Gly Thr 1040
ALC CL. CL. THE LAW VOI PRO GIN GIN GIV Phe Phe Sec Pro ASI	b Leo Illi Lio dià Illi
on, see the Alo His Aro Aro His Aro Ser Ser Ser Inc Arg Sel	r diy diy did Led 1000
Thr Leu Gly Leu Glu Pro Ser Glu Glu Gly Pro Pro Arg Ser Pro	
Gly Ala Gly Ser Asp Val Phe Asp Gly Asp Leu Ala Met Gly Va	
1110	1120
2 2 10 10 10 10 10 10 10 10 10 10 10 10 10	u Asp Pro Thr Leu Pro 1120
Ser Leu Ser Pro His Asp Leu Ser Pro Leu Gin Arg Tyr Ser Gie Leu Pro Pro Giu Thr Asp Giy Tyr Val Ala Pro Leu Ala Cys Se	4 • • • • • • • • • • • • • • • • • • •
Val Ash Gin Ser Giu Val Gin Pro Gin Pro Pro Leu Thr Pro Gin	u Gly Pro Leu Pro Pro 1160
Val Arg Pro Ala Gly Ala Thr Leu Glu Arg Pro Lys Thr Leu Se	EL ELO GIA TAR VILLE
Val Val Lys Asp Val Phe Ala Phe Gly Gly Ala Val Glu Asn Pr	o Glu Tyr Leu Val Pro 1200
1210	1220
Arg Glu Gly Thr Ala Ser Pro Pro His Pro Ser Pro Ala Phe Se	er Pro Ala Phe Asp Asn 1220
Law Tyr Tyr Tro Aso Gin Ash Ser Ser Glu Gin Gly Pro Pro Pr	O Set Astrille did diy
The Pro The Ala Glu Ash Pro Glu Tyr Leu Gly Leu Asp Val Pr	ro Val • • 1258

Fig. 9 (SEQ ID NO. 3)

	·
10	20 -
	1_1_1_1_1_1_
Met Glu Leu Ala Ala Leu Cys Arg Trp Gly Leu Leu Leu Ala L	eu Leu Pro Pro Gly Ala 20
Ala Ser Thr Gin Val Cys Thr Gly Thr Asp Met Lys Leu Arg L	eu Pro Ala Ser Pro Glu 40
The His Leu Asp Met Leu Arg His Leu Tyr Gln Gly Cys Gln V	/al Val Gin Gly Asn Leu 60
Glu Leu Thr Tyr Leu Pro Thr Asn Ala Ser Leu Ser Phe Leu G	Gin Asp Ile Gin Giu Val 80
Gin Gly Tyr Val Leu Ile Ala His Asn Gin Val Arg Gin Val P	ro Leu Gin Arg Leu Arg 100
110	120
, , , <u>, , , , , , , , , , , , , , , , </u>	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Ile Val Arg Gly Thr Gin Leu Phe Glu Asp Asn Tyr Ala Leu A	Ala Val Leu Asp Asn Gly 120
Asp Pro Leu Asn Asn Thr Thr Pro Val Thr Gly Ala Ser Pro G	Gly Gly Leu Arg Glu Leu 140
Gin Leu Arg Ser Leu Thr Giu Ile Leu Lys Giy Vai Leu I	lie Gin Arg Asn Pro Gin 160
Leu Cys Tyr Gin Asp Thr Ile Leu Trp Lys Asp Ile Phe His L	
Leu Thr Leu Ile Asp Thr Asn Arg Ser Arg Ala Cys His Pro C	
210	220
210 	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Gly Ser Arg Cys Trp Gly Glu Ser Ser Glu Asp Cys Gln Ser L	eu Thr Arg Thr Val Cys 220
Ala Gly Gly Cys Ala Arg Cys Lys Gly Pro Leu Pro Thr Asp C	Cys Cys His Glu Gin Cys 240
Ala Ala Gly Cys Thr Gly Pro Lys His Ser Asp Cys Leu Ala C	
Ser Gly Ile Cys Glu Leu His Cys Pro Ala Leu Val Thr Tyr A	
Ser Het Pro Asn Pro Glu Gly Arg Tyr Thr Phe Gly Ala Ser C	Lys Val Thr Ala Cys Pro 300
310	320
	<u> </u>
Tyritish Tyr Leu Ser Thr Asp Val Gly Ser Cys Thr Leu Val C	Cys Pro Leu His Ash Gin 320
Glu Val Thr Ala Glu Asp Gly Thr Gin Arg Cys Glu Lys Cys S	Ser Lys Pro Cys Ala Arg 340
Valitys Tyr Gly Leu Gly Met Glu His Leu Arg Glu Val Arg	Ala Val Thr Ser Ala Asn 360
Ile Gin Giu Phe Ala Gly Cys Lys Lys Ile Phe Gly Ser Leu	
Phe Asp Gly Asp Pro Ala Ser Asn Thr Ala Pro Leu Gin Pro (Giu Gin Leu Gin Val Phe 400
i = 410	420
Glu Thr Leu Glu Glu Ile Thr Gly Tyr Leu Tyr Ile Ser Ala	Trp Pro Asp Ser Leu Pro 420
Asp Leu Ser Val Phe Gin Asn Leu Gin Val Ile Arg Gly Arg	Ile Leu His Ash Gly, Ala 440
Tyr Ser Leu Thr Leu Gin Gly Leu Gly Ile Ser Trp Leu Gly L	Leu Arg Ser Leu Arg Glu 460
Ley Gly Ser Gly Ley Ala Ley Ile His His Asn Thr His Ley (Cys Phe Val His Thr Val 480
Pro Trp Asp Gin Leu Phe Arg Asn Pro His Gin Ala Leu Leu I	His Thr Ala Asn Arg Pro 500
510	520
	
Glu Asp Glu Cys Val Gly Glu Gly Leu Ala Cys His Gln Leu C	Cys Ala Arg Gly His Cys 520
Trp Gly Pro Gly Pro Thr Gin Cys Vai Asn Cys Ser Gin Phe I	Leu Arg Gly Gln Glu Cys 540
Val Glu Glu Cys Arg Val Leu Gln Gly Leu Pro Arg Glu Tyr	Val Asn Ala Arg His Cys 560
Leu Pro Cys His Pro Glu Cys Gln Pro Gln Asn Gly Ser Val	Thr Cys Phe Gly Pro Glu 580
Ala Asp Gin Cys Val Ala Cys Ala His Tyr Lys Asp Pro Pro I	Phe Cys Val Ala Arg Cys 600
	· · · · · · · · · · · · · · · · · · ·
610	620
	
Pro Ser Gly Val Lys Pro Asp Leu Ser Tyr Met Pro Ile Trp I	Lys Phe Pro Asp Glu Glu 620
Gly Ala Cys Gln Pro Cys Pro Ile Asn Cys Thr His Ser Cys	Val Asp Leu Asp Asp Lys 640 353

Fig. 10 (SEQ ID NO: 4)

	10	20
Glu Asp Asp Asp Met Gly Phe Phe Cys Pro Asp Pro Ser Ser Thr Arg Ser Gly	Pro Ala Ser Pro Leu Asp Ser Thr Phe Ty Asp Leu Val Asp Ala Glu Glu Tyr Leu Va Ala Pro Gly Ala Gly Gly Met Val His H Gly Gly Asp Leu Thr Leu Gly Leu Glu Pr Ala Pro Ser Glu Gly Ala Gly Ser Asp Va 110	al Pro Gin Gin Gly 40 lis Arg His Arg Ser 60 ro Ser Glu Glu Glu 80
Gin Arg Tyr Ser Giu Asp Pro Leu Thr Cys Ser Pro Pro Ser Pro Arg Giu Giy	Lys Gly Leu Gin Ser Leu Pro Thr His Aso Pro Thr Vai Pro Leu Pro Ser Glu Thr Aso Gin Pro Giu Tyr Vai Asn Gin Pro Asp Vai Pro Leu Pro Ala Ala Arg Pro Ala Gly Ala Gly Lys Asn Gly Vai Vai Lys Asp Vai Pro Leu Pro Ala Gly Vai Vai Lys Asp Vai Pro Leu Pro Ala Gly Vai Vai Lys Asp Vai Pro Leu Pro Ala Gly Vai Vai Lys Asp Vai Pro Leu Pro Ala Gly Vai Vai Lys Asp Vai Pro Leu Pro Leu Pro Ala Gly Vai Vai Lys Asp Vai Pro Leu Pr	sp Pro Ser Pro Leu 120 sp Gly Tyr Val Ala 140 al Arg Pro Gln Pro 160 la Thr Leu Glu Arg 180
Pro Pro Ala Phe Ser Pro	Tyr Leu Thr Pro Gln Gly Gly Ala Ala Pro Ala Phe Asp Asn Leu Tyr Tyr Trp Asp Gl Thr Phe Lys Gly Thr Pro Thr Ala Glu As • 267	In Asp Pro Pro Glu 240

Fig. 11 (SEQ ID NO: 5)

	10	20	
Gin Asn Giu Asp Leu Giy Pro Al Giu Asp Asp Asp Met Giy Asp Le Phe Phe Cys Pro Asp Pro Ala Pr	u Val Asp Ala Glu Glu	Tyr Leu Val Pro Gin Gin Giy	20 40 60

Fig. 12 (SEQ ID NO: 6)

									10	١									20		
				L															1	·	
Met	Glu	Lec	ı Alc	i Ala	Leu	ı Caa	s Arg	Trp	Gly	Lec	Lec	Lec	J Ala	Leu	صا د	4 Pro	Pro	Gly	Ala	20	
Alq	Ser	י ומר	- Gir) Val	Cys	ו וחר	. Gly	Thr	ASp) Met	Lvs	Leu	ı Am	l e.	, Pcc) Alc	Sec	Pro	Clu	40	
וחר	HIS	Lec	1 ASC	net	Leu	ı Arg	HIS	Leu	lyr	. Giu	GIV	Cvs	: Gin	Val	Val	Gin	GIV	ASD	I e	60	
Glu	Lec	ıınr	· Iyr	· Lec	ו ארכ	וחר	' ASN	PIA	Ser	· Leu	ı Ser	· Phe	: Leu	: GIn	Asc	o Ile	Gin	Glu	Val	80	
GIN	Gly	Tyr	· Val	Leu	ı Ile	Ala	His	Asn	Gin	Val	Arg	Gin	Val	Pro	Le	ı Gin	Arg	Leu	Arg	100	
									110)									120	•	•
																			1_		
lle	Val	Arg	Gly	Thr	GIN	Leu	Phe	Glu	Asp	Asn	Tyr	Ala	Leu	Ala	Val	Leu	ı Asp	Asn	Gly	120	
Asp	Pro	Leu	: Asn	ASN	The	Thr	Pro	Val	Thr	Gly	Ala	Ser	Pro	Gly	Gly	Leu	ı Ara	Glu	Leu	140	
Gin	Leu	ı Arg	Ser	· Leu	[hr	Glu	lle	Leu	Lys	Gly	Gly	Val	Leu	Ile	Gin	Ara	Asn	Pro	GIn	160	•
Leu	Eys	Tyr	GIN	Asp	Thr	lle	Leu	Trp	Lys	Asp	Ile	Phe	His	Lys	Asn	Asn	GIn	Leu	Ala	180	
Leu	Ψr	Leu	lle	Asp	דטר	Asn	Arg	Ser	Arg	Ala	Cys	His	Pro	Cys	Ser	Pro	Met	Cys	Lys	200	
,	M								210)									220		
	IJ.					<u> </u>													1		
Gly	Ser	Arg	Cys	Trp	Gly	Glu	Ser	Ser	Glu	Àsp	Cys	Gln	Ser	Leu	Thr	Arg	The	Val	Cys	220	
Ala	©ly	Gly	Cys	Ala	Arg	Cys	Lys	Gly	Pro	Leu	Pro	Thr	Asp	Cys	Cys	His	Glu	Gin	Cvs	240	
Ala	Ala	Gly	Cys	Thr	Gly	Pro	Lys	His	Ser	Asp	Cys	Leu	Ala	Cys	Leu	His	Phe	Asn	His	260	
Ser	6ly	lle	Cys	Glu	Leu	His	Cys	Pro	Ala	Leu	Val	Thr	Tyr	Asn	The	Asp	The	Phe	Glu	280	
Ser	Met	Pro	Asn	Pro	Glu	Gly	Arg	Tyr	Thr	Phe	Gly.	Ala.	Ser	Cys	Val	The	Ala	Cys	Pro	300	
	<u>.</u>								310										320		
	빌.																		1		·
Tyr	Asn	Tyr	Leu	Ser	Thr	Asp	Val	Gly	Ser	Cys	Thr	Leu	Val	Cys	Pro	Leu	Hıs	Asn	Gin	320	
Glu	Val	Thr	Ala	Glu	Asp	Gly	Thr	Gin	Arg	Cys	Glu	Lys	Cys	Ser	Lys	Pro	Cys	Ala	Ara	340	
Val	Cys	Tyr	Gly	Leu	Gly	Met	Glu	His	Leu	Arg	Glu	Val	Arg	Ala	Vai	Thr	Ser	Ala	Asn	360	
Ile '	Gin	Glu	Phe	Ala	Gly	Cys	Lys	Lys	lle	Phe	Gly	Ser	Leu	Ala	Phe	Leu	Pro	Glu	Ser	380	
Phe.	Asp	Gly	Asp	Pro	Ala	Ser	Asn	Thr	Ala	Pro	Leu	GIn	Pro	Glu	Gin	Leu	GIn	Val	Phe	400	
									410										420		
											1										
Glu	Thr	Leu	Glu	Glu	Ile	Thr	Gly	Tyr	Leu	Tyr	lle	Ser	Ala	Trp	Pro	Asp	Ser	Leu	Pro	420	
Asp I	Leu	Ser	Vai	Phe	Gin	Asn	Leu	Gin	Val	lle	Arg	Gly	Arg	lle	Leu	His	Asn	Gly	Ala	440	
Tyr !	Ser	Leu	Thr	Leu	GIN	Gly	Leu	Gly	lle	Ser	Trp	Leu	Gly	Leu	Arg	Ser	Leu	Arg	Glu	460	
Leu	Gly	Ser	Gly	Leu	Ala	Leu	lle	His	His	Asn	Thr	His	Leu	Cys	Phe	Val	His	Thr	Val	480	
Pro	ırp	Asp	GIN	Leu	rne	arg	ASN			GIU	Ala	Leu	Leu	His	ואר	Ala	Asn	_		500	
									510									:	520		
				 _							 -		 _		 -						
الماليا	ASP	Glu	Cys	Val	Gly	Glu	Gly	Leu	Ala	Cys	His	GIN	Leu	Cys	Ala	Arg	Gly	His	Cys	520	
ırp	ыy С	רנס	Gly	Pro	וחר	GIN	Lys Cla	vai .	ASN	Lys	ser	ษ์เก	rhe T	Leu	Arg	Gly	Gin	Glu	Cys	540	
val	GIU Daa	GIU	Lys	Arg	val	Leu	GIU .	uiy I	Leu	70	Arg	GIU '	Iyr	VQI Tha	ASN	Ala	Arg	His	Lys	560	
Leul	7.0	Cla	MIS Core	7FO	GIU	Cys	VIU :		GI∩ -	ASA	bly Ann	oer Oer	VQI	וטר- וטר	Lys	rne	Gly	rro	Glu	580	
MQ /	чэр	GIN	LYS	Val	PIA	CAR	MIC	пıS	IYC	Lys	ASP	rro	LL0	rne	Lys	Val	DIA	Arg !	LyS	600	

Fig. 12 (SEQ ID NO: 6)

	610	620
Pro Ser Gly Val Lys Pro Asp Leu Ser	Tyr Met Pro Ile Trp Lys Phe Pro Asp Glo	Glu 620
Gly Ala Cys Gln Pro Cys Pro Ite Asn	Cys Thr His Ser Cys Vol Asp Leu Asp Asi	LVS 640
Gly Cys Pro Ala Glu Gln Arg Ala Ser	Pro Leu Thr Ser Gin Ash Giu Asp Leu Giv	Pro 660
Ala Ser Pro Leu Asp Ser Thr Phe Tyr	Arg Ser Leu Leu Glu Asp Asp Asp Met Giv	/ Aso 680
Leu Val Asp Ala Giu Glu Tyr Leu Val	Pro Gin Gin Giy Phe Phe Cys Pro Asp Pro	Ala 700
	710	720
		
Pro Gly Ala Gly Gly Met Val His His	Arg His Arg Ser Ser Ser Thr Arg Ser Gly	Gly 720
Gly Asp Leu Ihr Leu Gly Leu Glu Pro	Ser Glu Glu Glu Ala Pro Arg Ser Pro Lei	a Ala 740
Pro Ser Glu Gly Ala Gly Ser Asp Val	Phe Asp Gly Asp Leu Gly Met Gly Ala Ala	Lys 7 60
Gly Leu Gln Ser Leu Pro Ihr His Asp	Pro Ser Pro Leu Gin Arg Tyr Ser Giu Asp	Pro 780
Thrival Pro Leu Pro Ser Glu Thr Asp	Gly Tyr Val Ala Pro Leu Thr Cys Ser Pro	GIn 800
!	810	820
		
Profigiu Tyr Val Asn Gin Pro Asp Val	Arg Pro Gin Pro Pro Ser Pro Arg Giu Giy	Pro 820
Leuiro Ala Ala Arg Pro Ala Gly Ala	Thr Leu Glu Arg Pro Lys Thr Leu Ser Pro	Gly 840
Lys Asn Gly Val Val Lys Asp Val Phe	Ala Phe Gly Gly Ala Val Glu Asn Pro Glu	Tyr 860
LeulThr Pro Gin Gly Gly Ala Ala Pro	Gln Pro His Pro Pro Pro Ala Phe Ser Pro	Ala 880
Phe Asp Asn Leu Tyr Tyr Trp Asp Gin	Asp Pro Pro Glu Arg Gly Ala Pro Pro Ser	Thr 900
* #	910	920
Phe Lys Gly Thr Pro Thr Ala Glu Asn	Pro Glu Tyr Leu Gly Leu Asp Val Pro Val	• 920
"संस्था इ.स. १ सम्बर्ध		

	10	20
	10	<u></u>
Met Giu Leu Ala Ala Leu Cys Arg Trp	Gly Leu Leu Leu Ala Leu Leu Pro Pro Gly	Ala 20
Ala Ser Thr Gin Val Cys Thr Gly Thr	Asp Met Lys Leu Arg Leu Pro Ala Ser Pro	Glu 40
Thr His Leu Asp Met Leu Arg His Leu	Tyr Gin Gly Cys Gin Val Val Gin Gly Asn	Leu 60
Glu Leu Thr Tyr Leu Pro Ihr Asn Ala	Ser Leu Ser Phe Leu Gin Asp Ile Gin Giu	Val 80
Gin Gly Tyr Val Leu lie ald his ash	Gin Vai Arg Gin Vai Pro Leu Gin Arg Leu	
	110	120
The Vol Ara Gly The Gla Ley Phe Gly	Asp Asn Tyr Ala Leu Ala Val Leu Asp Asn	Gly 120
Aso Pro Leu Aso Aso The The Pro Val	Thr Gly Ala Ser Pro Gly Gly Leu Arg Glu	Leu 140
Gin Leu Ara Ser Leu Thr Glu Ile Leu	Lys Gly Gly Val Leu Ile Gin Arg Asn Pro	GIn 160
Leu Cys Tyr Gin Asp Thr Ile Leu Trp	Lys Asp Ile Phe His Lys Asn Asn Gin Leu	Ala 180
Leu Thr Leu lie Asp Thr Asn Arg Ser	Arg Ala Cys His Pro Cys Ser Pro Met Cys	Lys 200
	210	220
	Ci. A. C. Ci. Cont. The Are The Vel	5.2 330
Gly Ser Arg Cys Irp Gly Glu Ser Ser	Glu Asp Cys Gin Ser Leu Thr Arg Thr Val	Cys 220 Cys 240
Alo Gly Gly Lys Ald Arg Cys Lys Gly	Pro Leu Pro Thr Asp Cys Cys His Glu Gin Ser Asp Cys Leu Ala Cys Leu His Phe Asn	•
Ald LAID GIV LYS ITII GIV ITO LYS ITIS	Ala Leu Val Thr Tyr Asn Thr Asp Thr Phe	
Section Pro Asia Pro Glu Giv Ara Tvr	Thr Phe Gly Ala Ser Cys Val Thr Ala Cys	
		320
		<u></u>
Tyr Asn Tyr Leu Ser Thr Asp Val Gly	Ser Cys Thr Leu Val Cys Pro Leu His Asn	Gin 320
Glu val Thr Ala Glu Asp Gly Thr Gln	Arg Cys Glu Lys Cys Ser Lys Pro Cys Ala	Arg 340
Val Cys Tyr Gly Leu Gly Met Glu His	Leu Arg Glu Val Arg Ala Val Thr Ser Ala	Asn 360
Ile Gin Giu Phe Ala Giy Cys Lys Lys	Ile Phe Gly Ser Leu Ala Phe Leu Pro Glu	Ser 380
Phe Asp Gly Asp Pro Ala Ser Asn Thr	Ala Pro Leu Gin Pro Giu Gin Leu Gin Vai	
177 F	410	420
Ol The Law Clu Clu He The Cly Tye	Leu Tyr Ile Ser Ala Trp Pro Asp Ser Leu	Pro 420
Accident Sec Vol Phe Gin Aso Leu Gin	Val Ile Arg Gly Arg Ile Leu His Asn Gly	
Tur Ser Leu Thr Leu Gin Gly Leu Giv	Ile Ser Trp Leu Gly Leu Arg Ser Leu Arg	
Leu Giv Ser Giv Leu Ala Leu Ile His	His Asn Thr His Leu Cys Phe Val His Thr	Val 480
Pro Trp Asp Gin Leu Phe Arg Asn Pro	His Gin Ala Leu Leu His Thr Ala Ash Arg	Pro 500
, ,		520
		C 520
Glu Asp Glu Cys Val Gly Glu Gly Leu	Ala Cys His Gin Leu Cys Ala Arg Gly His	Cys 520 Cys 540
irp Gly Pro Gly Pro Inc Gin Lys Val	Asn Cys Ser Gin Phe Leu Arg Gly Gin Giu Leu Pro Arg Giu Tyr Vai Asn Ala Arg His	
val blu blu Lys Arg val Leu bin bly	Gin Asn Gly Ser Val Thr Cys Phe Gly Pro	
Alo Aso Gio Cys Val Ala Cys Ala His	Tyr Lys Asp Pro Pro Phe Cys Val Ala Arg	
און און פון און און און און און און און	•	•
	610	620
One See Chy Wol Lys Pro Aso Ley Ser	Tyr Met Pro Ile Trp Lys Phe Pro Asp Glu	Glu 620
Fro ser Giv vai Lys rio hap Led ser	Cys Thr His Ser Cys Val Asp Leu Asp Asp	_
Cly Cys Pro Alo Glu Gin Aro Alo Ser	Pro Leu Thr Ser Gin Asn Giu Asp Leu Gly	Pro 660
Alo Ser Pro Leu Asp Ser Thr Phe Tyr	· Arg Ser Leu Leu Glu Asp Asp Asp Met Gly	ASP DOU
Leu Val Asp Ala Glu Glu Tyr Leu Val	Pro Gin Gin Giy Phe Phe Cys Pro Asp Pro	Ala 700
	710	720

Fig. 14 (SEQ ID NO: 8)

	10	20
Met Glu Leu Ala Ala Trp Cys Arg Trp	Gly Phe Leu Leu Ala Leu Leu Pro Pro Gly	Ile 20
Ala Gly Thr Gln Val Cys Thr Gly Thr	Asp Met Lys Leu Arg Leu Pro Ala Ser Pro	Glu 40
Thr His Leu Asp Met Leu Arg His Leu	Tyr Gin Gly Cys Gin Vai Val Gin Gly Asr	Leu 60
	Ser Leu Ser Phe Lou Gin Asp Ile Gin Giu	
Gin Gly Tyr Met Leu Ile Ala His Asn	Gin Val Lys Arg Val Pro Leu Gin Arg Leu	Arg 100
	110	120
		
	Asp Lys Tyr Ala Leu Ala Val Leu Asp Asr	
	Thr Pro Gly Arg Thr Pro Glu Gly Leu Arg	
	Leu Lys Gly Gly Val Leu Ile Arg Gly Asr	
	Trp Lys Asp Val Phe Arg Lys Asn Asn Gir	
Ald Pro Val ASP tie ASP thr ASh Arg	Ser Arg Ala Cys Pro Pro Cys Ala Pro Ala	·
_	210	220
The state of the Charles	Page Cl. And Cor Old Harton The Charles	71- 200
	Pro Glu Asp Cys Gin Ile Leu Thr Gly Thr	
	Gly Arg Leu Pro Thr Asp Cys Cys His Glu	
Cystald Aid Bly Cys I'll By I'o Cys	His Ser Asp Cys Leu Ala Cys Leu His Phe Pro Ala Leu Val Thr Tyr Asn Thr Asp Thr	e Asn 260 - Phe 280
	Tyr Thr Phe Gly Ala Ser Cys Val Thr Thr	
The flet his Asir it o did diy Alg		
	310	320
Pro Tyr Asn Tyr Leu Ser Thr Glu Val	Gly Ser Cys Thr Leu Val Cys Pro Pro Asr	Asn 320
	Gin Arg Cys Glu Lys Cys Ser Lys Pro Cys	
Ara Val Cys Tyr Gly Leu Gly Met Glu	His Leu Arg Gly Ala Arg Ala Ile Thr Ser	Asp 360
	Lys Ile Phe Gly Ser Leu Ala Phe Leu Pro	
Ser Phe Asp Gly Asp Pro Ser Ser Gly	Ile Ala Pro Leu Arg Pro Glu Gin Leu Gin	Val 400
· · · · · · · · · · · · · · · · · · ·	410	420
	Tyr Leu Tyr Ile Ser Ala Trp Pro Asp Ser	
	Arg Ile Ile Arg Gly Arg Ile Leu His Asp	
	Gly Ile His Ser Leu Gly Leu Ang Ser Leu	
	His Arg Asn Ala His Leu Cys Phe Val His	
Val Pro Irp Asp Gin Leu Phe Arg Ash	Pro His Gin Ala Leu Leu His Ser Gly Asr	_
	510	520
Page Cha Cha Ago Cag Cha Lou Cha Cha	Law Val Cos Ass Sas Law Cus Ala His Ch	His 520
	Leu Val Cys Asn Ser Leu Cys Ala His Gly Val Asn Cys Ser His Phe Leu Arg Gly Glr	
	s Val Ash Lys Ser His File Led Arg Gly Gil s Gly Leu Pro Arg Glu Tyr Val Ser Asp Lys	
	Pro Gin Asn Ser Ser Glu Thr Cys Phe Gly	
	His Tyr Lys Asp Ser Ser Ser Cys Val Ald	
2.2 /12 /ap 2 3/2 /an /an 3/2 /44	· · · · · · · · · · · · · · · · · · ·	
	• • •	
	610	620
Cue Pro Son Clay Vol. Land Pro Annua	Con To Mak Day 16 To a to To Day	0. 000
Chi Civ He Cue Cin Pro Cue Pro Tio	Ser Tyr Met Pro Ile Trp Lys Tyr Pro Asi Asn Cys Thr His Ser Cys Val Asp Leu Asp	9 Glu 620
Arg Gly Cys Pro Ala Glu Gln Arg Ala	Ser Pro Vol Thr Phe 654	9 Glu 640

Fig. 15 (SEQ ID NO: 9)

_	GAG G1u															48
	CCC Pro															96
_	CGG Arg															144
	TAC Tyr 50															192
															GTG Val 80	240
	GGC Gly									Val						288
CAG Gln	AGG Arg	CTG Leu	CGG Arg 100	Ile	GTG Val	CGA Arg	GGC Gly	ACC Thr 105	Gln	CTC Leu	TTT	GAG Glu	GAC Asp 110	Asn	TAT Tyr	336
GCC Ala	CTG Leu	GCC Ala	Val	CTA Leu	GAC Asp	AAT Asn	GGA Gly 120	Asp	CCG Pro	CTG Leu	AAC Asn	AAT Asn 125	ACC Thr	ACC Thr	CCT Pro	384

					CCA Pro											432
_					AAA Lys 150											480
					ACG Thr											528
					ACA Thr											576
-					ATG Met											624
					AGC Ser											<u>6</u> 72
					CCA Pro 230											720
					GGC Gly											768
					GGC Gly											816
ACC Thr	TAC Tyr	AAC Asn 275	ACA Thr	GAC Asp	ACG Thr	TTT Phe	GAG G1u 280	TCC Ser	ATG Met	CCC Pro	AAT Asn	CCC Pro 285	GAG G1u	GGC Gly	CGG Arg	864
					AGC Ser											912

TCT / Ser 305				Gly												٠	960
GAG Glu								Gln									1008
CCC Pro																	1056
GTG Val	AGG Arg	GCA Ala 355	GTT Val	ACC Thr	AGT Ser	GCC Ala	AAT Asn 360	ATC Ile	CAG G1n	GAG G1u	TTT Phe	GCT Ala 365	GGC Gly	TGC Cys	AAG Lys		1104
												TTT					1152
												CTC Leu					1200
GAG Glu	ACT Thr	CTG Leu	GAA Glu	GAG Glu 405	ATC Ile	ACA Thr	GGT Gly	TAC Tyr	CTA Leu 410	Tyr	ATC Ile	TCA Ser	GCA Ala	TGG Trp 415	CCG Pro		1248
GAC Asp	AGC Ser	CTG Leu	CCT Pro 420	Asp	CTC Leu	AGC Ser	GTC Val	TTC Phe 425	Gln	AAC Asn	CTG Leu	CAA Gln	GTA Val 430	ATC Ile	CGG Arg		1296
GGA Gly	CGA Arg	ATT Ile 435	Leu	CAC His	AAT Asn	GGC Gly	GCC Ala 440	Tyr	TCG Ser	CTG Leu	ACC Thr	CTG Leu 445	Gln	GGG Gly	CTG Leu		1344
GGC Gly	ATC Ile 450	Ser	TGG Trp	CTG Leu	GGG Gly	CTG Leu 455	Arg	C TCA Ser	CTC	AGG Arg	GAA G G1u 460	ı Lei	GGC Gly	AGT Ser	GGA Gly		1392
CTG Leu 465	Ala	CTC Leu	ATC Ile	CAC His	CAT His 470	Asr	AC(C CAC	CT(C TG(u Cy: 47!	s Phe	C GTG e Val	G CAC	AC(Thi	G GTG Val 480		1440



ATC (Leu	ATC Ile 675	AAG Lys	CGA Arg	CGG Arg	Gln	CAG G1n 680	AAG . Lys	ATC Ile	CGG Arg	AAG Lys	TAC Tyr 685	ACG Thr	ATG Met	CGG Arg	2064
AGA (CTG Leu 690	CTG Leu	CAG Gln	GAA G1u	Thr	GAG Glu 695	CTG Leu	GTG Val	GAG Glu	CCG Pro	CTG Leu 700	ACA Thr	CCT Pro	AGC Ser	GGA Gly	2112
GCG Ala 705	ATG Met	CCC Pro	AAC Asn	CAG Gln	GCG Ala 710	CAG G1n	ATG Met	CGG Arg	ATC Ile	CTG Leu 715	AAA Lys	GAG Glu	ACG Thr	GAG G1u	CTG Leu 720	2160
AGG Arg	AAG Lys	GTG Val	AAG Lys	GTG Val 725	CTT Leu-	GGA Gly	TCT Ser	GGC Gly	GCT Ala 730	TTT Phe	GGC Gly	ACA Thr	GTC Val	TAC Tyr 735	AAG Lys	2208
GGC Gly	ATC Ile	TGG Trp	ATC Ile 740	CCT Pro	GAT Asp	GGG Gly	GAG G1u	AAT Asn 745	GTG Val	AAA Lys	ATT	CCA Pro	GTG Va1 750	GCC Ala	ATC Ile	2256
AAA Lys	GTG Val	TTG Leu 755	Arg	GAA Glu	AAC Asn	ACA Thr	TCC Ser 760	Pro	AAA Lys	GCC Ala	AAC Asn	Lys 765	GAA Glu	ATC Ile	TTA Leu	2304
GAC Asp	GAA Glu 770	Ala	TAC Tyr	GTG Val	ATG Met	GCT A1a 775	Gly	GTG Val	GGC Gly	TCC Ser	CCA Pro 780) Tyr	GTC Val	TCC Ser	CGC Arg	2352
CTT Leu 785	Leu	GGC Gly	ATC Ile	TGC Cys	CTG Leu 790	Thr	C TCC Ser	ACG Thr	GTG Val	G CAG Glr 795	ı Lei	GTG Val	ACA Thr	CAG Glr	CTT Leu 800	2400
ATG Met	CCC	TAT Tyr	GGC Gly	TGC Cys 805	Leu	TTA Let	A GA(C CAT	GT(5 Va ⁻¹ 81(1 Arg	G GA	A AAC u Asr	CGC Arg	GG/ Gl; 81	A CGC y Arg 5	2448
CTG Leu	GG(Gly	C TCC	C CA(r Gl: 82(n Asp	CTO Le	i CT(G AAI u Asi	C TGO n Tri 82!	o Cy	T ATO	G CA t G1	G AT	F GC0 = Ala 839	Ly	G GGG s Gly	2496
ATC Met	AG(C TA r Ty 83	r Le	G GA(u G1)	GA GA	T GT p Va	G CG 1 Ar 84	g Le	C GT u Va	A CA 1 Hi	C AG s Ar	G GA g As . 845	p Le	G GC u Al	C GCT a Ala	2544

		Pro Asn His	GTC AAA ATT ACA Val Lys Ile Thr 860	2592
			ACA GAG TAC CAT Thr Glu Tyr His 875	2640
			CTG GAG TCC ATT Leu Glu Ser Ile	2688
- · · ·	nr His Gln Ser		AGT TAT GGT GTG Ser Tyr Gly Val 910	2736
			TAC GAT GGG ATC Tyr Asp Gly Ile 925	2784
			GAG CGG CTG CCC Glu Arg Leu Pro 940	2832
			ATG GTC AAA TGT Met Val Lys Cys 955	2880
			GAG TTG GTG TCT- Glu Leu Val Ser	2928
	la Arg Asp Pro		GTG GTC ATC CAG Val Val Ile Gln 990	2976
			ACC TTC TAC CGC Thr Phe Tyr Arg 1005	3024
		Asp Leu Val	GAT GCT GAG GAG Asp Ala Glu Glu 1020	3072



GTA CCC CAG CAG GG Val Pro Gln Gln Gl 1025				
GGC ATG GTC CAC CA Gly Met Val His Hi 10	s Arg His Arg S			Gly
GGG GAC CTG ACA CT Gly Asp Leu Thr Le 1060	u Gly Leu Glu P			
TCT CCA CTG GCA CC Ser Pro Leu Ala Pr 1075				
GAC CTG GGA ATG GG Asp Leu Gly Met Gl 1090			Leu Pro Thr	
GAC CCC AGC CCT CT Asp Pro Ser Pro Le 1105				
CCC TCT GAG ACT GA Pro Ser Glu Thr As				Gln
CCT GAA TAT GTG AA Pro Glu Tyr Val As 1140	n Gln Pro Asp \			
CGA GAG GGC CCT CT Arg Glu Gly Pro Le 1155		Arg Pro Ala Gly		
AGG CCC AAG ACT CT Arg Pro Lys Thr Le 1170			Val Lys Asp	
TTT GCC TTT GGG GG Phe Ala Phe Gly G1 1185				

 GGA Gly				Gln			Pro					Ala	3648
 GAC Asp			Tyr			Gln	Pro				Gly		3696
 CCC Pro		Thr				Pro				Pro			3744
 GGT Gly 1250	Leu							•	•		•		3768

Lenguergia decembate testimatiqua que da testimatiqua agracamente de decembrate de la concentration des la concentration de la

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Herceptin Binding by Direct Elisa 10/5/99

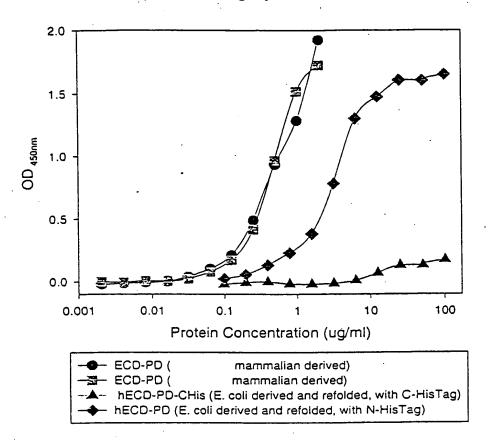
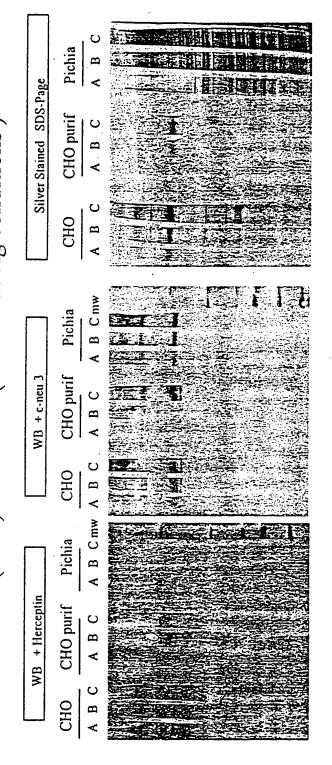


Fig. 17

Comparaison of Her2neu ECD-PD Expression in CHO-K1 (S/SF) and Pichia (Non reducing conditions)



Legend : CHO, A, B , C = 2,5 μ l / 5 μ l / 10 μ l

CHO purif, A, B, C = 125ng/250ng/500ng

Pichia ; A ,B ,C = 2,5 μ l / 5 μ l / 10 μ l from a 1/30 dilution of OD 120

Fig. 19 (SEQ ID NO:11)

		•				
atggagctgg	cggcctggtg	ccgttggggg	ttcctcctcg	ccctcctgtc	ccccggagcc	60
gcgggtaccc	aagtgtgtac	cggtaccgac	atgaagttgc	gactccctgc	cagtcctgag	120
acccacctgg	acatgcttcg	ccacctctac	cagggctgtc	aggtggtgca	gggcaatttg	180
gagcttacct	acctgcccgc	caatgccagc	ctctcattcc	tgcaggacat	ccaggaagtc	240
cagggataca	tgctcatcgc	tcacaaccga	gtgaaacacg	tcccactgca	gaggttgcgc	300
atcgtgagag	ggactcagct	ctttgaggac	aagtatgccc	tggctgtgct	agacaaccga	360
gaccctttgg	acaacgtcac	caccgccgcc	ccaggcagaa	ccccagaagg	gctgcgggag	420
ctgcagcttc	gaagtctcac	agagatcttg	aagggaggag	ttttgatccg	tgggaaccct	480
cagctctgct	accaggacat	ggttttgtgg	aaggatgtcc	tccgtaagaa	taaccagctg	540
gctcctgtcg	acatggacac	caatcgttcc	cgggcctgtc	caccttgtgc	cccaacctgc	600
aaagacaatc	actgttgggg	tgagagtcct	gaagactgtc	agatettgae	tggcaccatc	660
tgtactagtg	gctgtgcccg	gtgcaagggc	cggctgccca	ctgactgttg	ccatgagcag	720
tgtgctgcag	gctgcacggg	tcccaagcat	tctgactgcc	tggcctgcct	ccacttcaat	780
catagtggta	tctgtgagct	gcactgcccg	gccctcatca	cctacaacac	agacaccttc	840
gagtccatgc	tcaaccctga	gggtcgctac	acctttggtg	ccagctgtgt	gaccacctgc	900
ccctacaact	acctctccac	ggaagtggga	tcctgcactc	tggtctgtcc	cccgaacaac	960
caagaggtca	cagctgagga	cggaacacag	cggtgtgaga	aatgcagcaa	gccctgtgct	1020
ggagtatgct	atggtctggg	catggagcac	ctccgagggg	cgagggccat	caccagtgac	1080
aatatccagg	agtttgctgg	ctgcaagaag	atctttggga	gcctggcatt	tttgccggag	1140
agctttgatg	ggaacccctc	ctccggcgtt	gccccactga	agccagagca	tctccaagtg	1200
ttcgaaaccc	tggaggagat	cacaggttac	ctatacattt	cagcatggcc	agagagcttc	1260
caagacctca	gtgtcttcca	gaaccttcgg	gtcattcggg	gacggattct	ccatgatggt .	1320
gcttactcat	tgacgttgca	aggcctgggg	attcactcac	tggggctacg	ctcactgcgg	1380
gagetgggca	gtggattggc	tctcattcac	cgcaacaccc	atctctgctt	tgtaaacact	1440
gtaccttggg	accagctctt	ccggaacccg	caccaggccc	tactccacag	tgggaaccgg	1500
ccagaagagg	catgtggtct	tgagggcttg	gtctgtaact	cactgtgtgc	ccgtgggcac	1560
tgctgggggc	cagggcccac	ccagtgtgtc	aactgcagtc	agttcctccg	gggccaggag	1620
tgtgtggagg	agtgccgagt	atggaagggg	ctccccaggg	agtatgtgag	gggcaagcac	1680
tgtctgccat	gccaccccga	gtgtcagcct	caaaacagct	cggagacctg	ctatggatcg	1740
gaggctgacc	agtgtgaggc	ttgtgcccac	tacaaggact	catcttcctg	tgtggctcgc	1800
tqccccagtg	gtgtgaagcc	agacctctcc	tacatgccta	tctggaagta	cccggatgag	1860
gagggcatat	gtcagccatg	ccccatcaac	tgcacccact	catgtgtgga	cctggacgaa	1920
cgaggctgcc	cagcagagca	gagagccagc	ccagtgacat	tcatcattgc	aactgtggtg	1980
qqcqtcctgt	tgttcctgat	catagtggtg	gtcattggaa	tcctaatcaa	acgaaggcga	2040
cagaagatcc	ggaagtatac	catgcgtagg	ctgctgcagg	agaccgagct	ggtggagccg	2100
ctgacgccca	gtggagctgt	gcccaaccag	gctcagatgc	ggatcctaaa	ggagacagag	2160
ctaaggaagc	tgaaggtgct	tgggtcagga	gccttcggca	ctgtctacaa	gggcatctgg	2220
atcccagatg	gggagaacgt	gaaaatcccc	gtggccatca	aggtgttgag	ggaaaacaca	2280
tctcctaaag	ctaacaaaga	aatcctagat	gaagcgtacg	tcatggctgg	tgtgggttct	2340
ccatatgtgt	cccgcctcct	gggcatctgc	ctgacatcca	cagtgcagct	ggtgacacag	2400
cttatgccct	atggctgcct	tctggaccat	gtccgagaac	accgaggtcg	cttaggctcc	2460
caggacctgc	tcaactggtg	tgttcagatt	gccaagggga	tgagctacct	ggaggaagtt	2520
cggcttgttc	acagggacct	agctgcccga	aacgtgctag	tcaagagtcc	caaccacgtc	2580
aagattaccg	acttcgggct	ggcacggctg	ctggacattg	atgagactga	ataccatgca	2640
gatgggggca	aggtgcccat	caagtggatg	gcattggaat	ctattctcag	acgccggttc	2700
actcatcaga	gtgatgtgtg	gagctatggt	. gtgactgtgt	gggagctgat	gacctttggg	2760
gccaaacctt	acgatgggat	cccagctcgg	gagatecetg	atttgctgga	gaagggagaa	2820 2880
cgcctacctc	agcctccaat	ctgcaccatc	gacgtctaca	tgatcatggt	caaatgttgg	
atgattgact	ccgaatgtcg	cccgagattc	cgggagttgg:	catcagaatt	ctcccgtatg	2940 3000
gcaagggacc	cccagcgctt	tgtggtcatc	: cagaacgagg	acttaggccc	ctccagcccc	
atggacagca	. ccttctaccg	ttcactgctg	, gaggatgatg	acatggggga	gctggtcgat	3060
gctgaagagt	acctggtacc	ccagcaggga	ttettetee	cagaccctgc	cctaggtact	3120
gggagcacag	cccaccgcag	acaccgcago	: tcgtcggcca	ggagtggtgg	tggtgagctg	3180
acactgggco	tggagccctc	ggaagaagag	, ccccccagat	ctccactggc	tccctccgaa	3240
ggggctggct	ccgatgtgtt	tgatggtgac	ctggcagtgg	gggtaaccaa	aggactgcag	3300
agcctctctc	: cacatgacct	cagccctcta	ı cagcggtaca	. gtgaggatcc	cacattacct	3360

Fig. 19 (SEQ ID NO:11)

ctgcccccg	agactgatgg	ctacgttgct	cccctggcct	gcagccccca	gcccgagtat	3420
gtgaaccagc	cagaggttcg	gcctcagtct	cccttgaccc	cagagggtcc	teegeeteee	3480
atccgacctg	ctggtgctac	tctagaaaga	cccaagactc	tctctcctgg	gaaaaatggg	3540
gttgtcaaag	acgtttttgc	ctttgggggt	gctgtggaga	accctgaata	cctagcaccc	3600
agagcaggca	ctgcctctca	gccccaccct	tctcctgcct	tcagcccagc	ctttgacaac	3660
ctctattact	gggaccagaa	ctcatcggag	cagggtcctc	caccaagtac	ctttgaaggg	3720
acccccactg	cagagaaccc	tgagtaccta	ggcctggatg	tgccagtatg	a	3771

Fig. 20 (SEQ ID NO:14)

1					5					10	Phe I	•			15	
			2	20					25		Thr			30		
		35						40			Leu		45			
Lev	1 Ty:	Gl.	n (3ly	Cys	Gln	Val 55	Val	Gln	Gly	Asn	Leu 60	Glu	Leu	Thr	Tyr
65						70					Gln 75					80
Glr					85					90	Val				95	
			:	100					105		Leu			110		
		11	.5					120			Leu		125			
	13	o					135				Arg	140				
14	5					150					Leu 155					160
					165					170					175	
			:	180					185					190		Ala
_		19	95					200					205			Glu
	21	ο.			*		215					220				Gly
22	5					230					235					Gln 240
_					245					250				-	255	
				260			•		265					270		Leu
		2.	75					280					285			Gly
	29	0					295					300				Tyr
30	5					310					315					Asn 320
					325					330	1				335	
				340					345					350		Arg
		3	55					360	1				365			Cys
	37	0					375	5				380				Gly
3.8	5					390					395	i .				400
					405					410)				41:	
Pr	:0 G1	.u S	er	Phe	Gln	Asp	Leu	ı Ser	. Val	Phe	GIR	ASI	. ned	, wid	, va.	Ile

Fig. 20 (SEQ ID NO:14)

			420					425					430		
Arg	Gly	Arg 435	Ile	Leu	His	Asp	Gly 440	Ala	Tyr	Ser	Leu	Thr 445	Leu	Gln	Gly
	450					455					460		Leu		
465					470					475			Val		480
				485					490				Leu	495	
			500					505					Leu 510		
		515		•			520					525	Pro		
_	530					535	•				540		Val		
545					550			•		555			Gly		560
-				565					570				Ser	575	
-	_		580					585					His 590		
_		595					600					605	Lys Gly		
	610					615					620				Glu
625					630					635			Phe		640
_				645					650				Val	655	
			660					665					670 Tyr		
		675					680			•		685	Thr		
_	690					695					700				Glu
705			•		710					715	-				720 Tyr
	_	_		725					730				Pro	735	
-	_		740					745					750		Ile
Leu	Asp	755 Glu	Ala	Tyr	Val	Met	760 Ala		Val	Gly		765 Pro		Val	Ser
Arg	770 Leu	Leu	Gly	Ile				Ser	Thr			Leu	Val	Thr	Gln
785 Leu	Met	Pro	Tyr				Leu	Asp				Glu	His	Arg	800 Gly
Arg	Leu	Gly				Leu	Leu				Val	Gln	Ile 830	815 Ala	Lys
Gly	Met				Glu	Glu				Val	His	Arg 845	Asp	Leu	Ala
Ala				Leu	Val	Lys 855			Asn	His	Val 860	Lys		Thr	Asp
Phe 865	850 Gly		Ala	Arg	Leu 870	Leu		Ile	Asp	Glu 875	Thr		Tyr	His	Ala 880

Fig. 20 (SEQ ID NO:14)

	•										•
Asp Gly Gly Ly		Ile	Lys 1	_		la	Leu	Glu	Ser		Leu
	885			_	90	_	_	_		895	
Arg Arg Arg Ph		Gin		-	al T	rp	Ser	Tyr		Val	Thr
90			-	905					910		
Val Trp Glu Le	u Met Thr	Phe	Gly A	Ala L	ys P	ro '	Tyr	Asp	Gly	Ile	Pro
915			920		-		_	925	_		
Ala Arg Glu Il	e Pro Asn			23 m. T.	we G	:1v	Gl 11		T.e.11	Pro	Glm
930	.c .rc Asp	935	Dea c	JIU D	ys c		940	~- 3			GIII
	_, _,								_	_	
Pro Pro Ile Cy		_	Val 7	Tyr M			Met	Val	Lys	Cys	Trp
945	950				9	955.					960
Met Ile Asp Se	er Glu Cys	Arg	Pro A	Arg P	he A	irg	Glu	Leu	Val	Ser	Glu
-	965	_			70	_				975	
Phe Ser Arg Me		Acn	Dro C			he '	Va 1	Val	Tle		Aen
98		ASD			rg r	110	• 41	V 41	990	U 111	non.
		_		985	_		1			_	_
Glu Asp Leu Gl	y Pro Ser	Ser	Pro N	Met A	sp S	er	Thr			Arg	Ser
995			1000					1005			
Leu Leu Glu As	p Asp Asp	Met	Gly (Glu L	eu V	al.	Asp	Ala	Glu	Glu	Tyr
1010		1015					1020				-
Leu Val Pro Gl	n Gln Gly			Ser D	70 A				Len	Glv	Thr
1025	103			JCL F		035				U	1040
		_									
Gly Ser Thr Al		Arg	His A			er	Ser	Ala	Arg		
-	1045				050					1055	
Gly Gly Glu Le	u Thr Leu	Gly	Leu (Glu P	ro S	Ser	Glu	Glu	Glu	Pro	Pro
10	60		1	1065					1070)	•
		Ser	_		la G	ilv	Ser	Asp			Asp
Arg Ser Pro Le			Glu (Gly A	la G	Sly			Val		Asp
Arg Ser Pro Le 1075	u Ala Pro		Glu (Gly A				1085	Val	Phe	
Arg Ser Pro Le 1075 Gly Asp Leu Al	u Ala Pro	Val	Glu (1080 Thr I	Gly A		.eu	Gln	1085 Ser	Val	Phe	
Arg Ser Pro Le 1075 Gly Asp Leu Al 1090	eu Ala Pro	Val 1095	Glu (1080 Thr I	Gly A Lys G	ly L	.eu	Gln 1100	1085 Ser	Val Leu	Phe Ser	Pro
Arg Ser Pro Le 1075 Gly Asp Leu Al	eu Ala Pro	Val 1095	Glu (1080 Thr I	Gly A Lys G	ly L	.eu	Gln 1100	1085 Ser	Val Leu	Phe Ser	Pro
Arg Ser Pro Le 1075 Gly Asp Leu Al 1090	eu Ala Pro	Val 1095 Gln	Glu (1080 Thr I	Gly A Lys G	ly L	.eu	Gln 1100 Asp	1085 Ser	Val Leu	Phe Ser	Pro
Arg Ser Pro Le 1075 Gly Asp Leu Al 1090 His Asp Leu Se 1105	eu Ala Pro a Val Gly er Pro Leu 111	Val 1095 Gln 0	Glu (1080 Thr I Arg T	Gly A Lys G Tyr S	ly Ler G	Leu Glu L115	Gln 1100 Asp	1085 Ser Pro	Val Leu Thr	Phe Ser Leu	Pro Pro 1120
Arg Ser Pro Le 1075 Gly Asp Leu Al 1090 His Asp Leu Se	eu Ala Pro a Val Gly er Pro Leu 111 u Thr Asp	Val 1095 Gln 0	Glu (1080 Thr I Arg T	Gly A Lys G Tyr S Val A	ly Ler G	Leu Glu L115	Gln 1100 Asp	1085 Ser Pro	Val Leu Thr	Phe Ser Leu Ser	Pro Pro 1120 Pro
Arg Ser Pro Le 1075 Gly Asp Leu Al 1090 His Asp Leu Se 1105 Leu Pro Pro Gl	eu Ala Pro a Val Gly er Pro Leu 111 .u Thr Asp 1125	Val 1095 Gln O Gly	Glu (1080 Thr I Arg (Tyr (Gly A Lys G Tyr S Val A	er G la P 130	leu Slu 1115 Pro	Gln 1100 Asp Leu	Ser Pro	Val Leu Thr Cys	Phe Ser Leu Ser 1135	Pro Pro 1120 Pro
Arg Ser Pro Le 1075 Gly Asp Leu Al 1090 His Asp Leu Se 1105 Leu Pro Pro Gl Gln Pro Glu Ty	a Val Gly r Pro Leu 111 u Thr Asp 1125	Val 1095 Gln O Gly	Glu (1080) Thr I Arg T Tyr (Gly A Lys G Tyr S Val A Glu V	er G la P 130	leu Slu 1115 Pro	Gln 1100 Asp Leu	Ser Pro	Val Leu Thr Cys	Phe Ser Leu Ser 1135 Pro	Pro Pro 1120 Pro
Arg Ser Pro Le 1075 Gly Asp Leu Al 1090 His Asp Leu Se 1105 Leu Pro Pro Gl Gln Pro Glu Ty	eu Ala Pro a Val Gly er Pro Leu 111 u Thr Asp 1125 r Val Asn	Val 1095 Gln O Gly	Glu (1080 Thr I Arg T Tyr (Gly A Lys G Tyr S Val A Glu V	er G la P 130	leu Glu 1115 Pro	Gln 1100 Asp Leu Pro	Pro Ala	Val Leu Thr Cys Ser 1150	Phe Ser Leu Ser 1135 Pro	Pro Pro 1120 Pro Leu
Arg Ser Pro Le 1075 Gly Asp Leu Al 1090 His Asp Leu Se 1105 Leu Pro Pro Gl Gln Pro Glu Ty	eu Ala Pro a Val Gly er Pro Leu 111 u Thr Asp 1125 r Val Asn	Val 1095 Gln O Gly Gln	Glu (1080) Thr I Arg T Tyr (Pro (Pro (Gly A Lys G Tyr S Val A Glu V	er G la P 130	leu Glu 1115 Pro	Gln 1100 Asp Leu Pro	Pro Ala Gln	Val Leu Thr Cys Ser 1150 Ala	Phe Ser Leu Ser 1135 Pro	Pro Pro 1120 Pro Leu
Arg Ser Pro Le 1075 Gly Asp Leu Al 1090 His Asp Leu Se 1105 Leu Pro Pro Gl Gln Pro Glu Ty	eu Ala Pro a Val Gly er Pro Leu 111 u Thr Asp 1125 r Val Asn	Val 1095 Gln O Gly Gln	Glu (1080 Thr I Arg T Tyr (Gly A Lys G Tyr S Val A Glu V	er G la P 130	leu Glu 1115 Pro	Gln 1100 Asp Leu Pro	Pro Ala	Val Leu Thr Cys Ser 1150 Ala	Phe Ser Leu Ser 1135 Pro	Pro Pro 1120 Pro Leu
Arg Ser Pro Le 1075 Gly Asp Leu Al 1090 His Asp Leu Se 1105 Leu Pro Pro Gl Gln Pro Glu Ty 11 Thr Pro Glu Gl 1155	eu Ala Pro a Val Gly er Pro Leu 111 u Thr Asp 1125 r Val Asn 40 y Pro Pro	Val 1095 Gln O Gly Gln	Glu (1080 Thr I Arg T Tyr (Pro (1160	Gly A Lys G Tyr S Val A 1 Glu V 1145 Ile A	er G 1 1a P 130 Tal A	leu Glu 1115 Pro Arg	Gln 1100 Asp Leu Pro Ala	Pro Ala Gln Gly 1165	Val Leu Thr Cys Ser 1150 Ala	Phe Ser Leu Ser 1135 Pro	Pro Pro 1120 Pro Leu Leu
Arg Ser Pro Le 1075 Gly Asp Leu Al 1090 His Asp Leu Se 1105 Leu Pro Pro Gl Gln Pro Glu Ty 11 Thr Pro Glu Gl 1155 Glu Arg Pro Ly	eu Ala Pro a Val Gly er Pro Leu 111 u Thr Asp 1125 r Val Asn 40 y Pro Pro	Val 1095 Gln O Gly Gln Pro	Glu (1080 Thr I Arg T Tyr (Pro (1160 Pro (Gly A Lys G Tyr S Val A 1 Glu V 1145 Ile A	er G 1 1a P 130 Tal A	Slu 1115 Pro Arg	Gln 1100 Asp Leu Pro Ala Gly	Pro Ala Gln Gly 1165 Val	Val Leu Thr Cys Ser 1150 Ala	Phe Ser Leu Ser 1135 Pro	Pro Pro 1120 Pro Leu Leu
Arg Ser Pro Le 1075 Gly Asp Leu Al 1090 His Asp Leu Se 1105 Leu Pro Pro Gl Gln Pro Glu Ty 11 Thr Pro Glu Gl 1155 Glu Arg Pro Ly 1170	eu Ala Pro a Val Gly er Pro Leu 111 u Thr Asp 1125 r Val Asm 40 y Pro Pro	Val 1095 Gln 0 Gly Gln Pro	Glu (1080) Thr I Arg T Tyr (1090) Pro (1090) Pro (1090)	Gly A Lys G Tyr S Val A 1 Glu V 1145 Ile A	er G la P 130 al A rg P	Slu 1115 Pro Arg Pro	Gln 1100 Asp Leu Pro Ala Gly 1180	Pro Ala Gln Gly 1165 Val	Leu Thr Cys Ser 1150 Ala	Phe Ser Leu Ser 1135 Pro Thr	Pro 1120 Pro Leu Leu Asp
Arg Ser Pro Le 1075 Gly Asp Leu Al 1090 His Asp Leu Se 1105 Leu Pro Pro Gl Gln Pro Glu Ty 11 Thr Pro Glu Gl 1155 Glu Arg Pro Ly 1170 Val Phe Ala Ph	eu Ala Pro a Val Gly er Pro Leu 111 u Thr Asp 1125 r Val Asn 40 cy Pro Pro rs Thr Leu ne Gly Gly	Val 1095 Gln O Gly Gln Pro Ser 1175	Glu (1080) Thr I Arg T Tyr (1090) Pro (1090) Pro (1090)	Gly A Lys G Tyr S Val A 1 Glu V 1145 Ile A	er G 11 130 al A rg P ys A	leu Slu 1115 Pro Arg Pro	Gln 1100 Asp Leu Pro Ala Gly 1180 Glu	Pro Ala Gln Gly 1165 Val	Leu Thr Cys Ser 1150 Ala	Phe Ser Leu Ser 1135 Pro Thr	Pro Pro 1120 Pro Leu Leu Asp
Arg Ser Pro Le 1075 Gly Asp Leu Al 1090 His Asp Leu Se 1105 Leu Pro Pro Gl Gln Pro Glu Ty 11 Thr Pro Glu Gl 1155 Glu Arg Pro Ly 1170 Val Phe Ala Ph	eu Ala Pro a Val Gly er Pro Leu 111 .u Thr Asp 1125 er Val Asn 40 .y Pro Pro es Thr Leu 112 112 112 112 112 112 112 112 112 11	Val 1095 Gln O Gly Gln Pro Ser 1175 Ala	Glu (1080 Thr I Arg T Tyr (Pro (1160 Pro (Val (Gly A Lys G Tyr S Val A 1 Glu V 1145 Ile A Gly L Glu A	er G 11a P 130 al A rg P ys A	leu Slu 1115 Pro Arg Pro Asn	Gln 1100 Asp Leu Pro Ala Gly 1180 Glu	Pro Ala Gln Gly 1165 Val	Val Leu Thr Cys Ser 1150 Ala Val Leu	Phe Ser Leu Ser 1135 Pro Thr Lys	Pro 1120 Pro Leu Leu Asp Pro 1200
Arg Ser Pro Le 1075 Gly Asp Leu Al 1090 His Asp Leu Se 1105 Leu Pro Pro Gl Gln Pro Glu Ty 11 Thr Pro Glu Gl 1155 Glu Arg Pro Ly 1170 Val Phe Ala Ph	eu Ala Pro a Val Gly er Pro Leu 111 .u Thr Asp 1125 r Val Asn .40 .y Pro Pro rs Thr Leu ne Gly Gly 119 ar Ala Ser	Val 1095 Gln O Gly Gln Pro Ser 1175 Ala O	Glu (1080 Thr I Arg T Tyr (Pro (1160 Pro (Val (Gly A Lys G Tyr S Val A 13lu V 1145 Ile A Gly L Glu A	er G 11 1a P 130 al A rg P ys A sn P	leu Slu 1115 Pro Arg Pro Asn	Gln 1100 Asp Leu Pro Ala Gly 1180 Glu	Pro Ala Gln Gly 1165 Val	Val Leu Thr Cys Ser 1150 Ala Val Leu	Phe Ser Leu Ser 1135 Pro Thr Lys Ala	Pro Pro 1120 Pro Leu Leu Asp Pro 1200 Pro
Arg Ser Pro Le 1075 Gly Asp Leu Al 1090 His Asp Leu Se 1105 Leu Pro Pro Gl Gln Pro Glu Ty 11 Thr Pro Glu Gl 1155 Glu Arg Pro Ly 1170 Val Phe Ala Ph 1185 Arg Ala Gly Th	eu Ala Pro a Val Gly er Pro Leu 111 u Thr Asp 1125 r Val Asn 40 y Pro Pro rs Thr Leu 119 119 119 11 Ala Ser 1205	Val 1095 Gln O Gly Gln Pro Ser 1175 Ala O	Glu (1080) Thr I Arg T Tyr (Pro (1160) Pro (Val (Pro I	Gly A Lys G Tyr S Val A 13lu V 1145 Ile A Gly L Glu A His P	er G 11a P 130 al A rg P ys A sn P ro S 210	Slu 1115 Pro Arg Pro Asn Pro 1195 Ser	Gln 1100 Asp Leu Pro Ala Gly 1180 Glu	Pro Ala Gln 1165 Val Tyr Ala	Val Leu Thr Cys Ser 1150 Ala Val Leu	Phe Ser Leu Ser 1135 Pro Thr Lys Ala Ser 1215	Pro 1120 Pro Leu Leu Asp Pro 1200 Pro
Arg Ser Pro Le 1075 Gly Asp Leu Al 1090 His Asp Leu Se 1105 Leu Pro Pro Gl Gln Pro Glu Ty 11 Thr Pro Glu Gl 1155 Glu Arg Pro Ly 1170 Val Phe Ala Ph 1185 Arg Ala Gly Th	eu Ala Pro a Val Gly er Pro Leu 111 u Thr Asp 1125 r Val Asn 40 y Pro Pro rs Thr Leu 119 119 119 11 Ala Ser 1205	Val 1095 Gln O Gly Gln Pro Ser 1175 Ala O	Glu (1080) Thr I Arg T Tyr (Pro (1160) Pro (Val (Pro I	Gly A Lys G Tyr S Val A 13lu V 1145 Ile A Gly L Glu A His P	er G 11a P 130 al A rg P ys A sn P ro S 210	Slu 1115 Pro Arg Pro Asn Pro 1195 Ser	Gln 1100 Asp Leu Pro Ala Gly 1180 Glu	Pro Ala Gln 1165 Val Tyr Ala	Val Leu Thr Cys Ser 1150 Ala Val Leu	Phe Ser Leu Ser 1135 Pro Thr Lys Ala Ser 1215	Pro 1120 Pro Leu Leu Asp Pro 1200 Pro
Arg Ser Pro Le 1075 Gly Asp Leu Al 1090 His Asp Leu Se 1105 Leu Pro Pro Gl Gln Pro Glu Ty Thr Pro Glu Gl 1155 Glu Arg Pro Ly 1170 Val Phe Ala Ph 1185 Arg Ala Gly Th	eu Ala Pro a Val Gly er Pro Leu 111 .u Thr Asp 1125 r Val Asn .40 .y Pro Pro rs Thr Leu ne Gly Gly 119 nr Ala Ser 1205	Val 1095 Gln 0 Gly Gln Pro Ser 1175 Ala 0 Gln	Glu (1080) Thr I Arg T Tyr (1090) Pro (1090) Val (1090) Trp I	Gly A Lys G Tyr S Val A 13lu V 1145 Ile A Gly L Glu A His P	er G 11a P 130 al A rg P ys A sn P ro S 210	Slu 1115 Pro Arg Pro Asn Pro 1195 Ser	Gln 1100 Asp Leu Pro Ala Gly 1180 Glu	Pro Ala Gln 1165 Val Tyr Ala	Val Leu Thr Cys Ser 1150 Ala Val Leu	Phe Ser Leu Ser 1135 Pro Thr Lys Ala Ser 1215 Gln	Pro 1120 Pro Leu Leu Asp Pro 1200 Pro
Arg Ser Pro Le 1075 Gly Asp Leu Al 1090 His Asp Leu Se 1105 Leu Pro Pro Gl Gln Pro Glu Ty Thr Pro Glu Gl 1155 Glu Arg Pro Ly 1170 Val Phe Ala Ph 1185 Arg Ala Gly Th Ala Phe Asp As	eu Ala Pro a Val Gly er Pro Leu 111 .u Thr Asp 1125 r Val Asn .40 .y Pro Pro rs Thr Leu ne Gly Gly 119 nr Ala Ser 1205	Val 1095 Gln O Gly Gln Pro Ser 1175 Ala O Gln Tyr	Glu (1080) Thr I Arg T Tyr (1090) Pro (1090) Val (1090) Trp I	Gly A Lys G Tyr S Val A 13lu V 1145 Ile A Gly L Glu A His P Asp G 1225	er G 11 1a P 130 al A rg P ys A sn P 210 210	Slu 1115 Pro Arg Pro Asn Pro 1195 Ser Asn	Gln 1100 Asp Leu Pro Ala Gly 1180 Glu Pro Ser	Pro Ala Gln Gly 1165 Val Tyr Ala Ser	Val Leu Thr Cys Ser 1150 Ala Val Leu Phe Glu 1230	Phe Ser Leu Ser 1135 Pro Thr Lys Ala Ser 1215 Gln	Pro Pro 1120 Pro Leu Leu Asp Pro 1200 Pro Gly
Arg Ser Pro Le 1075 Gly Asp Leu Al 1090 His Asp Leu Se 1105 Leu Pro Pro Gl Gln Pro Glu Ty Thr Pro Glu Gl 1155 Glu Arg Pro Ly 1170 Val Phe Ala Ph 1185 Arg Ala Gly Th Ala Phe Asp As Pro Pro Pro Se	a Val Gly r Pro Leu 111 u Thr Asp 1125 r Val Asn 40 y Pro Pro r Thr Leu 1205 in Leu Tyr 20 r Thr Phe	Val 1095 Gln O Gly Gln Pro Ser 1175 Ala O Gln Tyr Glu	Glu G 1080 Thr I Arg T Tyr V Pro G 1160 Pro G Val G Pro H Trp I	Gly A Lys G Tyr S Val A 13lu V 1145 Ile A Gly L Glu A His P 1Asp G 1225 Thr P	er G 11 la P 130 al A rg P ys A sn P 170 S 210 ln A	Slu 1115 Pro Arg Pro Asn Pro 1195 Ser Asn	Gln 1100 Asp Leu Pro Ala Gly 1180 Glu Pro Ser Ala	ORSSET Pro Ala Gln Gly 1165 Val Tyr Ala Ser Glu	Val Leu Thr Cys Ser 1150 Ala Val Leu Phe Glu 1230 Asn	Phe Ser Leu Ser 1135 Pro Thr Lys Ala Ser 1215 Gln	Pro Pro 1120 Pro Leu Leu Asp Pro 1200 Pro Gly
Arg Ser Pro Le 1075 Gly Asp Leu Al 1090 His Asp Leu Se 1105 Leu Pro Pro Gl Gln Pro Glu Ty Thr Pro Glu Gl 1155 Glu Arg Pro Ly 1170 Val Phe Ala Ph 1185 Arg Ala Gly Th Ala Phe Asp As 12 Pro Pro Pro Se 1235	a Val Gly r Pro Leu 111 u Thr Asp 1125 r Val Asm 40 y Pro Pro x Thr Leu 1205 in Leu Tyr 20 r Thr Phē	Val 1095 Gln O Gly Gln Pro Ser 1175 Ala O Gln Tyr	Glu G 1080 Thr I Arg T Tyr V Pro G Pro G Val G Pro F Trp F Gly T 1240	Gly A Lys G Tyr S Val A Glu V 1145 Ile A Gly L Glu A His P 1Asp G 1225 Thr P	er G 11 la P 130 al A rg P ys A sn P 170 S 210 ln A	Slu 1115 Pro Arg Pro Asn Pro 1195 Ser Asn	Gln 1100 Asp Leu Pro Ala Gly 1180 Glu Pro Ser Ala	Pro Ala Gln Gly 1165 Val Tyr Ala Ser	Val Leu Thr Cys Ser 1150 Ala Val Leu Phe Glu 1230 Asn	Phe Ser Leu Ser 1135 Pro Thr Lys Ala Ser 1215 Gln	Pro Pro 1120 Pro Leu Leu Asp Pro 1200 Pro Gly
Arg Ser Pro Le 1075 Gly Asp Leu Al 1090 His Asp Leu Se 1105 Leu Pro Pro Gl Gln Pro Glu Ty Thr Pro Glu Gl 1155 Glu Arg Pro Ly 1170 Val Phe Ala Ph 1185 Arg Ala Gly Th Ala Phe Asp As Pro Pro Pro Se	a Val Gly r Pro Leu 111 u Thr Asp 1125 r Val Asn 40 y Pro Pro r Thr Leu 1205 in Leu Tyr 20 r Thr Phē	Val 1095 Gln O Gly Gln Pro Ser 1175 Ala O Gln Tyr	Glu (1080) Thr I Arg T Tyr (1090) Pro (1090) Val (1090) Trp I Gly T 1240 Val	Gly A Lys G Tyr S Val A 13lu V 1145 Ile A Gly L Glu A His P 1Asp G 1225 Thr P	er G 11 la P 130 al A rg P ys A sn P 170 S 210 ln A	Slu 1115 Pro Arg Pro Asn Pro 1195 Ser Asn	Gln 1100 Asp Leu Pro Ala Gly 1180 Glu Pro Ser Ala	ORSSET Pro Ala Gln Gly 1165 Val Tyr Ala Ser Glu	Val Leu Thr Cys Ser 1150 Ala Val Leu Phe Glu 1230 Asn	Phe Ser Leu Ser 1135 Pro Thr Lys Ala Ser 1215 Gln	Pro Pro 1120 Pro Leu Leu Asp Pro 1200 Pro Gly